

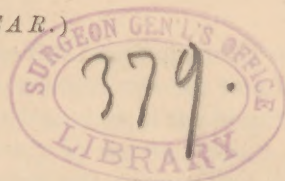
POOLEY, (J. H.)

REPORT

OF THE

SURGICAL CASES TREATED IN THE
ST. JOHN'S RIVERSIDE HOSPITAL,
YONKERS, N. Y., DURING
THE YEAR 1873.

(FOURTH YEAR.)



BY

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REPORT

REMARKS MADE DURING THE
VISIT TO THE HOSPITAL
OF THE U. S. ARMY
AT FORT MONROE, VIRGINIA
JANUARY 1914

BY

THE LIEUTENANT

OF THE MEDICAL DEPARTMENT
OF THE U. S. ARMY
AND
CAPTAIN

OF THE MEDICAL DEPARTMENT
OF THE U. S. ARMY

THE LIEUTENANT

OF THE MEDICAL DEPARTMENT

OF THE U. S. ARMY

AND

REPORT OF THE SURGICAL CASES TREATED IN THE ST. JOHN'S RIVERSIDE HOSPITAL, YON- KERS, N. Y., DURING THE YEAR 1873 (FOURTH YEAR).

THERE have been under my care in this hospital, during the year 1873, sixty-eight surgical cases, a larger number than in any previous year, showing that the advantages of the hospital are more and more appreciated, not only by the inhabitants of Yonkers, but also by most of the neighboring towns and villages.

The increase in the surgical practice of the hospital, though not rapid, has been continuous, as shown by the following figures. In 1870 there were 25 patients; in 1871 there were 58; in 1872 there were 63; and in 1873, 68.

These cases have been divided as follows, viz. :

Fractures of all kinds (not including those of the cranium) ..	11
Incised wounds.....	6
Railroad accidents.....	5
Abscess, in various situations.....	4
Contusion, and contused wounds.....	4
Ulcers.....	3
Fracture of cranium.....	3
Lacerated wounds.....	3
Suppuration of mastoid cells.....	2
Frost-bite.....	2
Arthritis of the knee.....	2
Diseases of the eye.....	2
Syphilis.....	2
Orchitis.....	2
Gunshot-wounds.....	2
Burns and scalds.....	2
Bursitis.....	1

Hernia.....	1
Injury of knee, with laceration of ligamentum patellæ...	1
Varicose veins.....	1
Erysipelas (ambulans).....	1
Stone in the bladder.....	1
Foreign body in the trachea.....	1
Hypertrophy of the nose.....	1
Aneurism	1
Vesico-vaginal fistula.....	1
Tetanus, traumatic.....	1
Dislocation of humerus and clavicle.....	1
Stricture of urethra.....	1
Total.....	68

Of these 68 cases there have been—

Discharged, cured.....	50
“ improved.....	4
Died in hospital	10
Remaining at the end of the year.....	4
Total.	68

The operations performed this year, exclusive of those of minor importance, have been nine in number, as follows:

Tracheotomy.....	2
Lithotomy, median	1
Circumcision.....	1
Trephining mastoid cells.....	1
Amputation of foot. Hey's.....	2
“ thigh.....	1
“ leg.....	1
Total	9

These have all been successful except the two operations of tracheotomy: in one of these, included in this report, a foreign body was impacted in the trachea, and could not be removed; the other, where death occurred from the rupture of an undiscovered aneurism, will be found in this JOURNAL for May, 1874.

The more important and interesting of the cases I will relate without classification, simply taking them up in the order in which they occur in the hospital case-book.

CASE I.—*Severe Injury of the Knee; Suppuration; Pyæmia, and Death.*—Ellen W——, aged twenty-one, native of Ireland, admitted February 9th. This girl, a servant in a family residing in Yonkers, met with her accident in the following manner: The day was a very windy one, and she, a very

large, heavy person, was running into the house from the back yard along a flagged walk which terminated in a stone step about two feet high; just as she reached this step, she either entangled her legs in her skirts, the wind blowing fiercely in her face at the time, or tripped on some ice, and struck her knee, bent at a right angle, with all the force that her weight and rapid motion could give, directly upon the sharp edge of this stone step. She was carried into the house, and I was immediately sent for to see her. Finding the case to be one of great gravity and danger, I advised her removal to the hospital, which was done at once.

Upon examination, the following state of things was found: In front of the right knee was a transverse, ragged, irregularly elliptical wound four inches in length, which corresponded, when the limb was straight, to the upper edge of the patella. The patella was not fractured, but its upper border was completely torn from the ligamentum patellæ, to which adhered numerous minute portions of bone, showing the force to have been an avulsive one; it was, as said, torn, not cut.

The fingers could be freely and easily introduced into the joint, which did not seem to have sustained any other injury. The wound did not bleed much; there was a free discharge of synovia; the patient was rather faint, and decidedly hysterical. This patient was one of the worst possible subjects for a severe injury; she was tall, for a woman, and very fat, soft, succulent, flabby, and fibreless; hair red; eyes light; skin red and white, like a wax-doll; disposition dull and spiritless: when informed of the serious nature of her injury, she seemed to receive it as a sentence of death, and yet with perfect apathy. Of course, nothing but the worst of consequences could be expected from a grave surgical injury in such a subject; and they were not long in making themselves apparent.

The wound, after being carefully cleansed, was loosely brought together with a few points of interrupted suture, the limb laid out straight, and a large India-rubber bag, filled with powdered ice, laid over the knee, and an anodyne ordered for the night. She had an hysterical paroxysm during the night, for which the house-surgeon made a suitable prescription. The next morning I found her in a comfortable condition, free

from pain, scarcely any inflammatory reaction in the knee, skin cool, pulse 120. Ordered cold to be continued, and, as she had no appetite, milk and beef-tea to be administered, with any cooling drink she preferred; she asked for lemonade, which was allowed. During the first week she remained in very much the same condition, fever rather high, her pulse was pretty uniformly at 120, and her temperature 103° ; she did not complain of much pain in the wound, which, together with the knee-joint, was remarkably free from heat, swelling, or redness; there is but slight purulent discharge. She lies in a listless, apathetic condition; her tongue is clean, but she takes no solid food whatever.

She takes an anodyne at night, and generally sleeps well, but is occasionally hysterical. Though no reason can be assigned for it, she passes her urine in bed most of the time, not even asking for the bedpan.

19th.—Condition of the patient much the same, except that she has evening fever; she lies in the same lethargic condition, and has taken as yet no solid food; she now refuses beef-tea, and takes nothing but milk-punch; she was ordered quinia sul., grs. v, three times a day. The stitches had been removed from the wound some days before; it is discharging more freely a thick, curdy pus, without odor; she complains of no pain in the knee except when moved. To-day, my attention was first called to a large bed-sore, which the nurse had noticed a day or two before on her left buttock; it was already as large as the hand, and the integument was in a state of slough. The ice-bag was kept on constantly for fifteen days; then it was kept on only part of the time for four days longer, the length of the application being diminished each day, when it was left off entirely.

A posterior splint was then applied, and retained by a plaster-of-Paris bandage, and a weak, cold solution of carbolic acid applied to the wound, which was left exposed. She was now ordered to lie a considerable part of the time on her right side, to avoid pressure on the bed-sore; this soon led to an abrasion over the right trochanter, which, in spite of every care, became a deep slough; the upper part of the splint also, though carefully padded, gave rise to an abrasion; the skin of

the heels also gave way ; indeed, wherever the least pressure was brought to bear, there seemed to be no vitality to resist it, and a sore was threatened.

March 3d.—She had a chill ; there was no change in the vital signs, which continued remarkably uniform, but she is emaciating, and evidently much weaker ; she lives almost entirely on milk-punch. The knee is discharging freely, but, as it was thought that nevertheless there might be injurious retention of matter, a drainage-tube was introduced, which worked well. She was ordered free doses of tinct. ferri chloridi with her quinine.

7th.—Had a repetition of the chill, which was followed by prolonged and copious perspiration. Pyæmia was diagnosed, and a corresponding prognosis expressed.

From this time she had a chill almost every day, sometimes several times a day ; sweats profusely, takes very little milk-punch, but a good deal of brandy-and-water.

Discharge from the knee more profuse and offensive ; pus seems to be burrowing up under the muscles of the thigh ; the bed-sores are spreading and fearfully offensive. As they extend through the adipose layer, it is a curious as well as a disgusting sight to see the oil dropping from them and floating in a thick, yellow pellicle on the top of the discharges. The care of this poor girl was from now and to her death a terrible task : we were obliged to remove all the other patients from the ward, and keep every window widely and constantly open. Notwithstanding this and the free use of carbolic acid, her immediate neighborhood was almost unbearable, and the nurses actually looked sick from their miserable task.

14th.—I was hastily summoned, as she was supposed to be dying. She lay in a state of apparent collapse, pale, and scarcely breathing, her face and forehead beaded with large drops of perspiration, and pulse scarcely perceptible ; but she rallied from this condition and lived several days with frequent repetitions of these sinking turns. Her pulse varied frequently from 120 to 160 per minute, temperature constantly below normal, sometimes as low as 95° ; she was part of the time delirious, and part of the time in a state of semi-coma, and for more than a week took nothing but brandy-and-water. She died *March 23d.*

No *post-mortem* examination was made, except of the leg. The structures of the knee-joint were completely disorganized, and its cavity filled with offensive pus; there was also a large collection of the same offensive matter both above and below the knee.

This poor girl's most wretched case affords material for much painful reflection. The injury itself was of a most serious as well as unusual character, and the inflammation, which was slow to make its appearance, was quite uncontrollable when it did come on. It is hard to say what other or more promising treatment could have been used than that which was employed, except it had been amputation, or ligature of the femoral artery. Severe though the wound was, it did not present such a formidable appearance as to justify the suggestion of primary amputation, nor would the friends have submitted to it; and at a subsequent period, when suppuration became profuse, there is not the least probability that she would have survived it. The ligature of the femoral as a prophylactic as well as curative procedure in these cases, as suggested and practised by Dr. David L. Rogers, of New York, in 1849, and more recently by Mr. Maunder and other British surgeons, can scarcely be considered as a recognized plan of treatment; and yet, if it ever deserved a trial, it would be in such a case as this, though, whether such a subject would have survived it, is more than questionable. There was no injurious penning up of matter, as the large opening, assisted by the drainage-tube, served to drain it completely.

Wounds penetrating the knee-joint, even when small, are justly considered serious injuries, and yet at times they do perfectly well. We had a man in the hospital, in 1871, who had received a wound on the inner side of the patella, an inch and a half long, penetrating the joint, which had been inflicted three weeks previously, and on his admission synovitis had already set in. His leg was put up in a plaster-of-Paris bandage, leaving the front of the knee exposed, to which ice was applied. At the expiration of a week he became uneasy at his confinement and eloped from the hospital. We anticipated, of course, the worst of consequences from this rash action,

but I met him two months afterward walking freely with no perceptible limp. He said he had kept the plaster bandage on for two weeks and had then taken it off, and begun to walk about; the wound was healed, and, though his knee was stiff, it gave him but little trouble, and soon "got all right;" a result he certainly had no good reason to expect.

CASE II. *Destructive Inflammation of the Knee-Joint; Amputation; Recovery.*—Ellen H—, aged twelve years, native of Ireland, admitted February 11th. This child was a patient in the hospital during the month of February last year for chronic arthritis of the left knee; while in the house she improved satisfactorily, but her parents took her away at the end of a month, in spite of our remonstrances, and against the child's own wish, who cried bitterly when she was taken away. It seems that after her removal she continued to improve for a short time, and she was allowed to walk and run about, when she soon began to limp and complain of pain in her knee. This constantly increased, and for the last four months she had been confined to bed, suffering much pain, and frequently waking up at night, screaming loudly with violent starting pains in the limb, which would be jerked up quite a distance from the bed. Upon her admission the second time the left knee was very much swollen, but not uniformly so, the swelling being most prominent on the inner side over the internal tuberosity of the tibia. There was no fluctuation, the swelling was firm and elastic, the patella was movable. The joint was very hot and tender; she lay on her side, with the knee bent at rather more than a right angle; any attempt to move it was impracticable, as she screamed loudly with fear at the merest suggestion of such a thing.

Her pulse was quick, and her tongue somewhat furred, but, considering her long confinement and suffering, she looked remarkably well. She was placed under the full influence of chloroform, and the limb straightened, which was accomplished without any difficulty; it was kept straight by extension with a weight and pulley. While she was under the influence of chloroform the actual cautery was applied in three parallel lines over the inner or most swollen portion of the joint, the knee was covered with a hot, soft poultice, and an anodyne

ordered for the night; ordered also full diet and cod liver-oil. The relief to pain was immediate and remarkable after the first night, when it was very moderate; the starting pains did not recur.

The sores made by the cautery were kept open for a month and then healed up; the child during this time made excellent progress, ate well, slept well, was free from pain, and in good spirits.

This apparent improvement, however, was only temporary and deceitful; at no time could she bear to have the weight removed, the slightest and shortest contact of the joint-surfaces producing severe pain. We tried the experiment of putting the limb up in a plaster-of-Paris bandage, but this was not well borne, and at the end of a few days had to be taken off.

So she went on until July, when rather suddenly the knee enlarged and became more painful. Upon approximating the joint-surfaces a grating crepitus was perceptible.

It soon became evident that the joint was full of pus, and it was accordingly freely opened by an incision on each side of the patella; afterward matter made its appearance below the knee, and was also evacuated. The little patient's health gave way, the discharge continued profuse, and gradually became offensive. Irritative fever of a severe type came on, the child emaciated rapidly, and her life was in grave danger.

Under these circumstances, on August 1st I amputated just above the knee by the circular method; hardly any blood was lost, and only one artery was tied. She experienced no shock whatever from the operation, but seemed better immediately afterward. She made a very rapid recovery, and improved immensely in general health. She was discharged, with a firm, useful stump, October 10th.

I have frequently seen her since, a fine, florid, healthy-looking girl, growing rapidly, and running briskly about on an artificial leg of domestic manufacture, which I really believe is more useful to her than the limb many times is, after even boasted cases of excision of the knee, where both the shortening and the long-enduring tenderness at the ankylosed joint are serious drawbacks to the result.

CASE III. *Railroad Accident*.—This case is mainly interesting from the *post-mortem* appearances observed.

C. E. C., aged forty-two years, a native of the United States, admitted February 18th, injured by a collision on the Hudson River Railroad.

He had a severe lacerated wound of the left foot, compound fracture of left forearm, upper lip cut completely through, slight cuts about the upper part of the neck, and fracture of several of the upper ribs on the left side. Shock was so severe and protracted that for two days it was doubtful whether he would ever rally; he did, however, and lived till the 24th, nearly a week, when he died of chest complications.

Post Mortem.—There was a severe lacerated wound of the left foot, by which all the muscles and integument of the sole, except a small portion in front, were completely stripped off, and hung in a loose flap; the wound was in a sloughing condition, and had he lived would have necessitated amputation.

There was a compound fracture of both bones of the left forearm, with great displacement, and laceration of surrounding soft parts. There was an irregular, jagged, superficial wound under the chin, several inches in extent, but only implicating the skin; the upper lip was cut completely through near the middle, but there was no injury to the bone or loosening of the teeth.

There was a fracture of the first five ribs on the left side, either near or at their junction with the sternum, and in the two lower of them there was a second fracture near their middle. In two places these fractures, being very oblique, had given rise to sharp-pointed extremities, which, apparently from the compressing nature of the force producing them, had been driven in upon the pleura, and given rise to severe pleuritis, as evinced by abundant effusion of both lymph and serum.

There was, also, either from the same cause, or extension of the inflammation, pericarditis, with serum and lymph in the pericardium, and congestion of the lower lobe of the left lung, probably coming on only a short time before death. The only indication of any preëxisting disease observed was an enlarged and fatty liver.

Implication of the viscera contained in the chest, from fractured ribs, seems to be tolerably rare, though always to be feared; how frequently it may occur to such a slight degree as to scarcely complicate the case or retard recovery, we have no means of knowing, but in these terrible crushing accidents it probably always takes place to some extent. Another man, injured in this same accident, had both legs smashed below the knee, and fracture of the skull; he died in a few hours, of shock.

CASE IV. *Chancroids; Phimosis; Circumcision; Good Result.*—I have always entertained a great dread of performing circumcision or any other operation upon the prepuce during the existence of venereal disease, from a fear that the poisoning of the wound might prove more troublesome than the condition for the relief of which the operation was performed; but the following case, important in no other particular, shows that this is not always so, but that sometimes at least freedom from the restraint of a tight phimosis is the *sine qua non* for the healing of such sores.

Eugene C—, aged twenty-six years, a native of Ireland, admitted April 23d.

He first made his appearance at the out-door department, two weeks before his admission to the house; he then stated that ten days previously he had had an impure connection, and a week afterward noticed some sores on his penis. At the time of his admission as an in-patient, the orifice of the prepuce was completely surrounded by a circle of small excavated ulcers; the prepuce was very much contracted, and could not be drawn back to the slightest extent. There were evidently, from the previous history, and from the present symptoms, viz., spots of hardness, pain, and discharge, two ulcers on the glans penis.

He was placed in bed and black wash applied to the sores at the preputial orifice, while a solution of carbolic acid was freely injected under the prepuce three times a day.

A bubo developed on the right side, which suppurated, was freely opened, and soon healed up.

The sores on the foreskin also speedily healed, but the occult ones were evidently getting worse rather than better. I

was compelled, therefore, though reluctantly, to perform *circumcision*, which I much prefer to slitting operations.

The operation was performed on May 2d, in the ordinary way; the edges of the mucous membrane and integument were united by numerous points of fine suture.

Two irritable sores were found just behind the corona glandis; these healed rapidly after the operation, seeming only to have needed setting free from their unhealthy prison. As might have been expected, immediate union failed in the line of incision, but it never assumed a specially unhealthy appearance, or seemed disposed to spread; on the contrary, union took place by granulation, as in any wound which has failed to heal by first intention; it proceeded very favorably, and was complete in three weeks. He was discharged cured May 30th. The chaneroids and the wound were both dressed throughout with carbolic acid.

CASE V. *Stone in the Bladder; Median Lithotomy; Recovery.*—Henry Ward, aged nine, born in the United States, admitted June 13th.

This case was sent down from Sing Sing by Dr. Helm, of that place. The mother gave the following history:

She says he first began to complain about New Year's; his first complaint was of pain in his side; she thought he had worms, and gave him some vermifuge medicine; he passed no worms, but seemed to get better after this, but only for a few days; he then began to have incontinence of urine, both nocturnal and diurnal, wetting his clothes frequently by day, and his bed always at night; this symptom still continues.

He has severe pain in making water, and also before and after the act; sometimes he has sudden stoppage of the stream, and at other times difficulty in starting it; when he strains violently, he has pain in the end of his penis, and frequently pulls at his prepuce, which shows some evidence of this by being slightly elongated. His mother has never noticed either blood or pus in his urine, though she says it is sometimes thick; running or jumping gives him pain. He is a well-grown boy for his age, but has a pale, worn look, indicative of habitual suffering; his bowels are regular, but his appetite is poor, and he is losing flesh; his face is pitted with small-pox. He was

chloroformed, a sound introduced, and a stone readily found; I judged it to be single, of moderate size, and hard consistence.

He was ordered to be kept quiet, have medium diet, flax-seed-tea for drink, and an anodyne at bedtime.

14th.—He took ten drops of McMunn's elixir last night, and slept well all night; he wet his bed in the night; seems quite comfortable this morning.

17th.—The patient has been very comfortable during the few days of his residence in the hospital; he wets his bed every night, but has only passed urine involuntarily during the daytime once; he complains of little or no pain on making water; to-night he is to have a dose of castor-oil, and at noon, tomorrow, a large injection of warm water.

18th.—At three o'clock, P. M., I performed the operation of median lithotomy, and removed an exceedingly rough mulberry calculus, weighing eighty grains.

The operation presented nothing worthy of remark, and was accomplished without difficulty of any kind.

For the first few days the patient, though he had not complete incontinence, had much less control over his bladder than we usually see after this operation; when he felt the desire to urinate, and called for the bedpan, if it was not supplied instantly, he could not retain his urine, but wetted the bed. After a few days this passed off, and he had perfect control of his bladder during the daytime, but occasionally wetted his bed at night. His recovery was considerably retarded by an attack, apparently of circumscribed inflammation about the cæcum; there was a good deal of pain, with exquisite tenderness in the right iliac fossa, hot skin, furred tongue, pulse 120, temperature 102°. He was treated with morphine and poultices. The tenderness did not spread, and in about ten days the attack subsided; his mother informed us that he had had one or two previous attacks of a similar character. He was discharged well, July 21st, and I saw him about a year after, the picture of health, a perfect contrast to the pale, worn boy, I had operated upon.

This case fully confirmed all my favorable impressions of the operation of median lithotomy; indeed, for small calculi,

it seems to me hard even to imagine a more thoroughly satisfactory procedure. I was much surprised to find in Dr. Gouley's recent work on "Diseases of the Urinary Organs," at page 347, in his table of American Operations, that I am credited with two operations and one death. This is a complete mistake; I have had no death from the operation; one of my patients died seven months afterward of calculous pyelitis, but the operation had no more to do with it than if he had died fifty years afterward of cerebral hæmorrhage.

CASE VI. *Foreign Body in the Trachea*.—On the evening of June 20th, about seven o'clock, I was summoned in great haste to the hospital with the message that a child had been brought in choking to death with something in its throat. I hastily collected such instruments as might be necessary for tracheotomy, and repaired to the hospital.

I there found a child named William B——, aged two years, in a condition of most alarming asphyxia, and gathered the following facts from the father, who was present: The child had been sitting at the supper-table with the family, eating meat, when all of a sudden it was taken with a most severe fit of choking; the father seized the child in his arms and ran with it to the hospital. When I saw it, it was already insensible, quite blue in the face, almost pulseless, and breathing in gasps at long intervals. I passed my finger down the œsophagus as far as possible, but met with no obstruction there; upon listening to the chest, respiratory sounds were completely abolished; the heart was beating feebly.

There was evidently no time to be lost, and I at once divided the three upper rings of the trachea, opening that tube freely; the operation was accomplished without delay or difficulty, but the child, who was quite unconscious of the incisions, only breathed a few times afterward, and died while efforts were being made to discover or dislodge the foreign body.

At the *post-mortem* examination next morning we found in the middle of the trachea a large uncooked garden-pea, which completely occupied its lumen; no mechanical contrivance could more completely have occluded the trachea than did this smooth globular body.

When and how it obtained its entrance is a mystery, as there were no peas at the table when it was taken with the choking; and it had had no previous attack of strangulation that was known of, nor had the parents seen any peas in the child's possession during the day.

Only two suggestions present themselves: it may, perhaps, possibly have been inhaled some time during the day, and retained in one of the ventricles of Morgagni, and dislodged during supper—we proved by trial that these spaces were large enough to have contained it—but still, this is extremely unlikely; more probably it was retained in one of the mucous folds at the top of the larynx, and dislodged thence during an act of deglutition; at any rate, the case was a very singular one, and no doubt our ignorance of the nature of the foreign body prevented our efforts at its removal from being as appropriate and effective as they might otherwise have been.

CASE VII. *Separation of the Upper Epiphysis of the Humerus.*—Alice F—, aged twelve, born in the United States, admitted July 2d. A short time before, she had fallen from a tree, striking on the left shoulder, and, on being taken up, it was found that the left arm was quite useless, and painful on being moved.

On examining her at the hospital, the following facts were noticed: there was apparently some depression of the shoulder, but not marked, as ordinarily seen in a dislocation; there was no globular swelling, like the head of the humerus in the axilla, but in front of the limb, an inch or more below the joint, there was a peculiar pointed, but not sharp projection.

Upon moving the arm, the patient being chloroformed, an unnatural mobility was discovered high up near the shoulder, and an obscure crepitus was detected. Though I had never seen a case of this kind before, I had no difficulty in diagnosing a diastasis of the upper end, or anatomical neck of the humerus.

The arm was put up in a pasteboard splint made to cover the outside of the arm and the top of the shoulder; this was afterward changed for a similar contrivance made of tin; but neither of these splints seemed fully to meet the indication, and better coaptation was obtained by bringing the arm close

to the side, and the elbow well up by broad strips of strong adhesive plaster.

The dressing was left on for three weeks, and then removed ; union was found to have taken place, but the peculiar projection in front of the shoulder was nearly as marked as at the time of the accident, and there was considerable limitation of motion ; passive motion was made use of every day, and considerable improvement took place, but when she left the hospital, July 26th, she could not yet raise her hand to the top of her head. I saw her at the expiration of several months, when motion had become all but quite perfect, and this arm was practically as good and useful as the other ; indeed, she knew no difference between them, but the prominence in front was still quite noticeable, though not as marked as when she left the hospital, and on measurement the injured arm was found to be half an inch shorter than the other. I do not know how rare this accident is ; this is the only example of it which I have seen.

The best account to be found of it in literature is in Robert W. Smith's treatise on "Fractures in the Vicinity of Joints." His description of the symptoms and the anatomical conditions involved is very thorough and accurate, and has formed the foundation of all that has since been written on the subject, although his plate of the peculiar deformity is undoubtedly exaggerated.

He gives a description of a case which coincides very exactly with the one above related, of which he says, "Various mechanical contrivances were employed in this case, but all proved ineffectual in maintaining the fragments in their proper relative position ;" and then goes on to make the following remarks, which are fully borne out by our isolated experience : "It is not to be imagined that any moderately well-informed surgeon will be likely to confound this injury with any other incidental to the upper extremity of the humerus ; but I am sure that, however experienced the practitioner may be, he will find the treatment of the case embarrassing, and that it will require the exercise of all his ingenuity and skill to prevent a certain amount of displacement from being permanent, and to counteract the influence of the muscles, which unceas-

ingly act upon the lower fragment. The consolation, however, remains, that, notwithstanding the deformity, the patient will ultimately regain the almost unimpaired use of the limb."

This is the state of the case as Dr. Smith left it, and thus has it remained until quite recently, when Prof. E. M. Moore, of Rochester, has shown that the reason of the resulting deformity is to be found in the fact that, hitherto, surgeons have failed to reduce it in the first place. From a thorough and exhaustive review of this subject, and a careful and independent study of the anatomical conditions, he has discovered a method by which it may be easily and thoroughly reduced.

This is accomplished by completely extending the arm at right angles to the trunk, and, owing to the irregularities and serrations existing between the ruptured or separated surfaces of the diaphysis and epiphysis, when once reduced the separation has no great tendency to recur, and any simple extension apparatus is sufficient to complete the cure.

The doctor has verified the correctness of this position by the treatment of several cases on the principles here set forth with absolutely perfect results; he has also demonstrated his method to the surgeons of New York City, several of whom, as I am informed, have tried it with equally good results.

He also brought the subject before the last meeting of the American Medical Association, in whose transactions no doubt a complete description and explanation of it will be found. Whether it has had any other publication I do not know; I await with interest an opportunity of trying it for myself.

CASE VIII. *Hypertrophy of the Nose*.—R. W., a native of the United States, aged sixty-four years, admitted August 1st.

He was admitted for delirium tremens; he has evidently once occupied a respectable position in society, but habits of drunkenness have brought him to the condition of an abject pauper.

He attracted my attention by the remarkable appearance of his nose. This organ is very much enlarged, particularly at its end, which presents the appearance of a large, unsightly bulbous projection; it is of a deep-purple color, and thickly studded with round depressions or excavations, the sunken orifices of enlarged sebaceous follicles, from which he can

squeeze out numerous worm-like particles of the contained sebaceous matter. Believing that something could be done to improve his appearance, which was rendered exceedingly grotesque by this unseemly proboscis, I proposed the subject to him, and found that he was not only willing but anxious to have me try.

Accordingly, on August 8th I operated on his nose, by cut-out a thick, wedge-shaped piece from the end—all that could be removed, indeed, without injuring the septum—and uniting the flaps by silver sutures; before operating, I had supposed, from its feel to the finger, that tissue was soft and spongy, but, to my surprise, when I came to cut it, I found it very hard and firm; it consisted mainly of hypertrophied dermoid elements.

12th.—Four days after the operation the sutures were removed, and union found to have taken place so perfectly that scarcely a perceptible cicatrix was to be seen, and when he was discharged he was very much improved indeed; his nose was of a respectable size and shape, and had lost most of its exuberant richness of hue; this last result being no doubt largely due to his enforced abstinence while in the hospital. When I performed this little operation I had never read or heard of a similar one, but since then I have come across a case of Mr. Syme's so similar and so illustrative of the subject, that I cannot forbear transcribing it.

I quote from Maclean's edition of Syme's "Surgical Works," p. 850:

"E. M., aged eighteen years, came from the country on the 26th of April, complaining of her nose, which, although originally not different from that of other people, had four or five years ago undergone a remarkable alteration, that rendered her countenance, not ill-favored in other respects, extremely peculiar and repulsive.

"This deformity was an expansion of the extremity into a globular shape, not depending upon enlargement of the skin merely, as happens not unfrequently in the male sex at an advanced period of life, but being a morbid development of all the tissues, so that even the columna was longer than usual. In the ordinary case of integumental hypertrophy of the nose, it is well known that tumors, no matter how numerous or

enormous, may be removed without any inconvenience, since they only require to be shaved off, without taking away the skin through its whole thickness, so that the cutaneous surface which remains cicatrizes with nearly the same rapidity and facility as the one caused by a blister. I have, therefore, not scrupled to perform operations of this kind even at or beyond the age of eighty years, where the growth had become so large as to render existence very uncomfortable, by exciting the ridicule and disgust of those who witnessed it. But the condition of this young woman did not admit of remedy on such a principle, and at first sight seemed an improper subject for interference. The patient's urgency having led me to reconsider the subject, I resolved to try the effect of removing a wedge-shaped portion of the prominence, and did so on the 6th of May, by means of two decided longitudinal incisions, embracing the projections, passing through the cartilages, and meeting at some distance down the septum. The edges of the wound were brought together by silver sutures, and united so that they left no trace of their existence, the nose not only being rendered very shapely, but allowing the other features to present their naturally pleasing aspect."

These are the only two cases of this kind that I know of.

CASE IX. *Gangrenous Ulcer*.—Elisha P——, aged sixty-five years, a native of the United States, admitted August 10th.

He has been a very intemperate man; twelve years ago he had venereal disease. In April of 1869 a sore made its appearance on his left leg, near the ankle, about the size of a silver dollar, which increased in size, and he was sent to Bellevue Hospital, where a portion of the fibula was exsected and the leg healed up.

After leaving the hospital he commenced drinking again, and again the sore broke out in the following spring. He went to Bellevue again in July, 1870, and returned cured once more in September of the same year. He resumed his intemperate habits, the sore broke out again, and by the spring of 1872 had got quite bad, but was held somewhat in check by the use of carbolic acid; it has not been healed since this last recurrence in 1872, and since last spring has been getting worse very rapidly.

However, he kept up, and was walking about until August 2, 1873, when he took to his bed; his appetite has been very poor for a long time, and since his going to bed he has eaten nothing at all, and has taken no stimulant during this last week; he has complained very much of thirst.

Upon his admission to the hospital he had a large gangrenous ulcer, involving nearly the whole of the lower third of the left leg, exposing about four inches of the tibia, which was perfectly bare, dry, rough, and of a dirty-brown color.

The foot was cold, of a bluish hue, and several of the toes were gangrenous; the gangrenous parts are quite black, in some places dry and hard, in others moist and exuding a thin, filthy, and stinking discharge, thus presenting a mixture of the two forms of gangrene, dry and wet.

The immense ulcer on the leg was filled and heaped up with thousands of large, full-grown maggots, presenting a most disgusting sight, and stank abominably. Chloroform was freely poured over the ulcer, which killed the maggots instantly; they were then scraped away by the handful with a spatula, some adhering so forcibly between the muscular interspaces, and under the edge of the bone, that they had to be separately pulled away with the forceps.

The poor old man's condition generally was filthy in the extreme, showing an utter lack of care for a long time back. The pulse was scarcely perceptible at the wrist, and there was every evidence of rapid sinking. He was ordered whiskey, beef-tea, and milk, as much as he could take, and five grains of carbonate of ammonia every hour.

August 11th.—Continues about the same as last night; pulse, though very feeble, can now be counted beating about 100 in the minute; no urine having passed since his admission, a catheter was introduced, but no urine was found in the bladder; continue nourishment and stimulants as before.

12th.—He remained about the same, with some embarrassment of respiration and hiccough, and died at 9 P. M.

Post Mortem.—Only the leg was examined. The connective tissue and muscular interspaces for some distance above the sore were infiltrated with a putrid sanies, and the muscles themselves softened and discolored.

About an inch and a half of the lower end of the fibula, commencing just above the malleolus, was wanting, the upper and lower remaining portions of the bone terminating in smooth-pointed extremities.

Several inches of the lower end of the tibia was rough, and of a worm-eaten appearance, presenting the aspect of superficial caries or ulceration of bone; there were no surface necrosis and no particles of loose bone to be seen.

The anterior tibial artery was calcified throughout its whole extent, and formed a rigid, unyielding tube. The whole body was extremely emaciated; *rigor mortis* well marked.

CASE X. *Traumatic Tetanus*.—Johanna O'C—, aged thirty years, native of Ireland, admitted October 29th; married, mother of six children; says she has always been healthy.

Ten days ago, while in a state of intoxication, she fell and struck her right hand against a sharp, jagged stone, inflicting a lacerated wound diagonally across the dorsal surface of the first phalanx of the ring-finger, near the joint.

She brought it together with sticking-plaster, which next morning she changed for a poultice, and then for soap-and-sugar, and then for some salve, ingredients unknown; but among all these means of treatment cleanliness was never included.

About four days after the injury, the finger became very much inflamed, and discharged a thin matter, in moderate quantity, which continues to the present time.

The wound presents an unhealthy appearance; the discharge is thin and sanious, and it is filled with pale, rather luxuriant granulations. The day before her admission she began to have stiffness of the jaws, and pain in the masseter muscles, also in the head, and chest over the sternum, reaching down to the epigastrium, and in the back of the neck.

The pain, though complained of all the time, is increased in paroxysms, which are accompanied with spasm of the masseter and muscles of the neck, with marked retraction of the head, and spasm of the muscles of respiration.

The paroxysms are quite severe, and accompanied with difficult respiration, sobbing, and loud complainings. She is a woman of violent and utterly ungoverned temper and emotions.

Her skin is moist and natural, pulse weak and small, 106 per minute, respiration 40, temperature normal.

She says she has not eaten much for a week, first from pain in her hand and arm, latterly from inability to open her mouth. Her tongue is coated and of a dark-purple color; her incisor teeth cannot be separated for more than a quarter of an inch—barely that—any attempt to open them more widely provokes pain and spasm; during a paroxysm they are tightly closed. Pupils normal, responsive to light; urine copious and natural.

She was etherized, and a free incision made over the injury down to the bone, and considerable pent-up offensive matter discharged; the bone was found carious and the joint completely disorganized. The injured finger was enveloped in a flaxseed-poultice, and five drops of a tincture of Calabar bean (equal to one grain of the bean) ordered to be taken every hour, with strong beef-tea and milk at about the same interval.

The administration of the Calabar-bean was commenced at noon; she had paroxysms every ten minutes up to 5 P. M., one between 5 and 5.45 P. M., and none during the night, resting pretty well.

30th.—Had a spasm at 7 A. M., and another at 9, more severe; pupils not at all contracted. To take ten drops of the Calabar tincture every hour. Noon.—Has had very frequent paroxysms since morning; gave half a grain of morphia hypodermically, which procured some sleep; ordered the tinct. Calabar to be increased to twenty drops every hour. 4 P. M.—Has had another half-grain injection of morphia, since which she has had no spasms up to 6 o'clock, and is much quieter, and sweating freely; complains of itching of the skin (effect of morphia); pulse 100, temperature in the rectum $100\frac{1}{2}^{\circ}$; mouth can be opened to the extent of half an inch.

31st.—Has been pretty quiet during the night, but has had some hard spasms; at 5 o'clock was in great distress; an hypodermic injection of half a grain of morphia quieted her as before; had two more paroxysms between that and 9 o'clock. Ordered twenty-five drops of the Calabar tincture every hour; mouth opens three-quarters of an inch.

Evening.—Condition about the same as last report; skin cool and sweating.

November 1st.—Patient had a bad night, slept very little; has had three hypodermic injections of morphia of half a grain each since the last report; is tolerably quiet now. Pulse more rapid, up to 120; opisthotonos more marked than at any time; ordered the tincture increased to thirty drops every hour.

Evening.—Has been worse all day, paroxysms have been frequent and violent, necessitating two hypodermic injections as before; she has taken less nourishment, and is weaker; spasms are both more violent and more general; breathing and swallowing both interfered with; is cyanotic. Increased tincture to forty drops.

2d.—Patient had two hypodermic injections last night; she is quieter to-day, has had no decided paroxysms, her neck is firmly retracted, but her jaws open better. To-day she is to take fifty drops of the tincture every hour, to take it every two hours through the night; whiskey, an ounce every two hours, added to her milk and beef-tea.

3d.—Patient failing; no paroxysm, but she is partially delirious, and very weak, with rapidly-failing circulation. She died quietly at 9.30 A. M.

Her temperature, which was carefully recorded three times a day, never rose higher than $100\frac{1}{2}^{\circ}$, and was most of the time normal. No *post-mortem* examination was permitted.

Notwithstanding the fatal issue of this case, it was evident that the Calabar bean had great power in controlling the paroxysms, and I felt strongly encouraged to give it further trial. Large as the doses administered in this case may seem to some, they were almost trifling compared with the quantities I have since exhibited in a severe case with the happy result of curing my patient; and I am firmly convinced that we have now a powerful agent for the control and cure of tetanus, only it must be given in unsparing doses, utterly without regard to quantity, but of course not without careful watching for its physiological effects, which, however, I must say I have seen nothing of as yet. This may seem strong language to use on such a slender experience as mine; but, if one waits for a large experience in tetanus before forming or expressing an opinion, he may wait a long time; and I am already firmly convinced that we should have accumulated

many more favorable facts to guide and encourage us, had this remedy been more fearlessly and heroically given. I do not inculcate rashness, but I would certainly begin with as large doses as I left off with in this case, and push it unhesitatingly until the physiological effects, such as feebleness of the heart's action and contraction of the pupils, demanded a cessation, or the tetanic spasms were controlled.

The patient whose case we are considering was in every respect a bad and unpromising subject, addicted to intoxication, dirty and abandoned in all her habits, and withal miserably poor and run down from irregular and insufficient nourishment.

Upon reflection I am obliged to confess that I think the local treatment was not wholly defensible or above criticism. I am now convinced that the injured finger ought to have been amputated. If this had been done, and the stump left open, and dressed with warm water, or an aqueous solution of opium, it might have added a trifle to her chances; although, as it was very freely opened, so as to discharge all secretions as soon as formed, perhaps a great deal of stress cannot be laid on this.

Before this case I had only seen three other cases of traumatic tetanus, all of which terminated fatally, and which I propose briefly to recite in this place, for the purpose which will appear in the sequel. They are as follows:

January 7, 1862.—I amputated the thigh of a boy, fourteen years of age, who had been run over on a railroad, in Washington, D. C., but had no other charge of the case until symptoms of tetanus declared themselves.

The amputation was performed just below the trochanter major, by the circular method; and the patient, notwithstanding an evident lack of proper care, went on very well until the *thirteenth* day after the operation, when symptoms of tetanus, with lockjaw and painful spasm of the stump, set in, and, in spite of all that could be done, the patient expired at the end of the second day from the first appearance of these symptoms. The large wound left after such an operation as this is not of the kind that is usually looked upon as likely to be followed by tetanus. It does not seem probable that a

nerve-end had been included in any of the ligatures, or the symptoms would have come on sooner, and the weather was not hot of course, neither was it excessively cold. But there was one condition that existed, though it ought not, which deserves attention. I have never seen a serious surgical case so badly neglected as this was; the stump was abominably filthy, and was tightly bandaged up, apparently without any preliminary cleansing, which bandage was left undisturbed for three or four days at a time, when, as might be expected, the condition of things within was fearful.

In the summer of 1865, since I have been in Yonkers, the following case occurred: A man got his hand mangled in some machinery at one of the hat-factories, and went to a homœopathic physician, who dressed it at his office. He subsequently, the next day I think, went to a regular practitioner, who dressed it for him, but appears to have paid very little attention to it.

The next day, the third from the injury, he sent for me, and I found him suffering from well-marked tetanus. The hand was in a very filthy, stinking condition, done up in a large poultice which had evidently not been changed for some time; there were several parts of fingers in a state of gangrene, and the whole hand seemed hopelessly lost. As he was very poor, and his surroundings extremely wretched, he was sent down to a hospital in New York in a carriage, with some sulphuric ether to inhale for the alleviation of spasm by the way, but he died soon after reaching the hospital.

June 28, 1868.—I was asked by Dr. Arnold to see with him in consultation a young man, who had the night before, in a street fracas, received a pistol-shot wound in the right thigh.

I found the patient, a fine, athletic young Scotchman, about nineteen years of age, in bed, with a small, round opening, as of a bullet-wound, about the middle of the external aspect of the right thigh, over the course of the vastus externus muscle.

Dr. Arnold, who had been called to him the night before, soon after the receipt of the injury, had not been able to find the bullet, which was evidently a small one. I was equally unsuccessful. Cold-water dressing was applied to the wound, and rest enjoined; there was scarcely any pain, swelling, or

redness, about the limb. The case went on very favorably for several days, there being scarcely any evidence of inflammation, and no discharge from the wound.

July 4th.—Just about a week from the infliction of the injury I was again requested to see him at 10 P. M. I found him in an advanced stage of tetanus, he was strongly opisthotonic, his body resting on the heels and occiput, while his back formed a high arch under which several pillows were stuffed; his jaws were firmly locked, the risus sardonius well marked, and his whole appearance frightful in the extreme.

Every few minutes he was seized with universal spasms, in which he roared out from excess of agony. Pulse quick, tongue clean.

These symptoms of tetanus had come on the day before, and their importance was at first overlooked by the family, who failed to notify the doctor.

An hypodermic injection of twenty minims of Magendie's solution of morphia was administered at once, and one drachm of bromide of potassium ordered to be taken every hour.

These remedies alleviated the symptoms somewhat, but he died the next morning at seven o'clock, and at 3 P. M., the same day, I proceeded, in the presence of Dr. Arnold and the friends of the patient, to examine the wounded leg.

On making the necessary dissection, I found the bullet, a somewhat singular one, being formed of tin-foil, such as is used to wrap tobacco in, rolled and pressed together into a pretty firm ball; it was quite small, and somewhat disintegrated, and was found in the middle of the vastus externus muscle, surrounded by a small quantity of dirty, fetid pus.

Although carefully looked for, no special injury of nerve-fibres could be detected. It is important to remark that the weather at this time was most extremely hot.

It will be seen that all these cases (and for this reason the last three are added) have one fact in common, and that is the retention in or in contact with the wound of decomposing and irritating matter; and I am led to believe not only that this was the provoking cause of tetanus in these cases, but that it is a more frequent cause than is generally believed.

Of course it is not intended to intimate that this is the sole, or even that it is the *most frequent* cause of tetanus. The first

proposition would certainly not be true; neither probably would the second, though I am by no means so sure of this. I have not had the time to make an extended examination of recorded cases of tetanus to find out in how many, or in what proportion of them, such a condition obtained, but I think such an inquiry would be well worth while, and might shed great light on the question.

I desire not to be misunderstood as saying that this suggestion has any thing new about it; nothing of the sort, I know better; it is given among the causes of tetanus in many works, and by various authors, but without any special emphasis. It is generally taken for granted that some special injury or implication of nerve-fibre should be found or hypothesized as the provoking cause of tetanus, but I do not see why this should be so any more than in the very analogous disease hydrophobia. Surely, if in this disease the introduction, and possibly localization, of a virus may produce all the wonderful reflex phenomena which characterize it, why may not a similar condition exist in tetanus, at least in a larger proportion of cases than hitherto supposed?

CASE XI. *Dislocation of Humerus and Clavicle*.—Lewis S—, colored, coachman, born in the United States, aged thirty-four years, admitted December 19th.

He was thrown from his carriage and sustained various injuries, for which he was brought to the hospital. He was considerably bruised about the right hip, but no special injury could be detected.

There was a dislocation of the acromial end of the clavicle on the left side, and he said that the right shoulder had been dislocated in the fall, but when he had been taken hold of by the arm to lift him up it had gone in again. There was no appearance of dislocation about the shoulder, but, on taking hold of the arm to examine it more particularly, a dislocation into the axilla was immediately produced, and as easily reduced again, thus confirming his previous statement. This was the more remarkable, as he had never had a dislocation previous to the present accident.

The clavicular dislocation was treated by placing a pad over the end of the clavicle, and endeavoring to keep it in

place by a broad piece of stout adhesive plaster carried over the shoulder and across the chest.

Being anxious to return to his family, he was discharged December 24th, but did not resume his work for some weeks. The acromio-clavicular articulation became quite firm, and presented but a very moderate amount of deformity; the shoulder gave no trouble at all; the pain, especially on exercise, about the bruised hip, was the most lasting result of his injury, but this gradually wore away.

These cases of double dislocation are somewhat rare. I reported an interesting one of dislocation of the humerus forward, and of the sternal end of the clavicle of the same side, in the *American Journal of Medical Sciences* for July, 1865.

With regard to the spontaneous reduction of dislocations, the following case, which came to my notice several years ago, is worthy of a passing remark:

A lady was thrown from an open wagon, the horse running away, and struck against a stone-wall by the road-side.

The messenger who came for me stated that her principal injury was to one of her hips; that the limb on that side was fixed, and any attempt to move it gave her extreme pain. I went to her house, some miles off, expecting to find a dislocation of the hip, and when I arrived received the following account:

When she was brought home the limb was fixed, and painful upon any attempt at motion, as already said; those around her further informed me that it was shorter than the other, and the foot turned in; on lifting her into bed, some one took hold rather roughly of the injured limb, when she screamed out with pain; a snap was audible to every one present, and a moment after she exclaimed, "Now it's all right," and so it appeared. I found no sign of any existing dislocation or fracture, and there was nothing beyond some slight cuts about the head, and a soreness of the hip, which kept her in bed for a week. I feel as sure as I can be without having seen it, that there had been a dislocation of the hip, probably on the dorsum ilii, which had been reduced unwittingly in the manner stated. Perhaps these are not strictly *spontaneous* reductions, but no other descriptive term suggests itself, and they are at any rate as near it as can readily be imagined.

